

**BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554**

**RECEIVED****FEB 23 1993**FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of:

VERILINK CORPORATION

Petition for Rulemaking to Amend  
the Commission's Part 68 Rules  
to Authorize Regulated Carriers  
to Provide Certain Line Build Out  
Functionality as a Part of Regulated  
Network Equipment on Customer Premises

RM-8158

**REPLY COMMENTS OF  
INTEGRATED NETWORK CORPORATION**

Integrated Network Corporation ("INC"), by its undersigned attorneys, hereby submits these reply comments in support of Verilink Corporation's ("Verilink") petition for rulemaking ("Petition") proposing to amend Part 68 of the Commission's Rules to permit carriers to provide line build out ("LBO") functionality in the transmission path of 1.544 Mbps ("DS-1") services as a component of regulated network equipment located on customer premises. Verilink specifically proposed that Section 68.308(h)(2)(e) be amended to delete subsections (ii) and (iii).<sup>1/</sup>

As detailed in its comments, INC believes that the rule amendments proposed by Verilink, if adopted, will reduce customer dissatisfaction associated with the installation of customer premises equipment ("CPE"), facilitate implementation of the ANSI DS-1 Metallic

<sup>1/</sup> Section 68.308(h)(2) identifies three signal attenuation settings for NCTE -- Option A, B, and C with a value of 0 db, 7.5 db and 15 db -- that can be selected at the time of installation. Verilink's proposed amendment would delete reference to Options B and C leaving Option A (at 0 db) the only LBO attenuation setting to be selected.

Interface Standard, and eliminate equipment redundancies. Further, INC believes that permitting carrier-provision of LBO in the DS-1 transmission path will encourage the deployment of advanced digital transmission technologies and the modernization of the U.S. telecommunications network infrastructure. Based on these benefits, INC's comments concluded that Verilink's Petition makes a compelling case for permitting carrier-provided LBO and modifying Section 68.308(h)(2)(e). With the exception of the Independent Data Communications Manufacturers Association ("IDCMA"), the Commenters concur with INC's conclusion that grant of Verilink's Petition will simplify customer installation procedures and advance the Commission's policy of encouraging the deployment of advanced technologies. Accordingly, INC urges the Commission to grant Verilink's Petition and take the first step in updating the Part 68 rules to accommodate current end user needs and technological advancements.

**I. SUBSTANTIAL SUPPORT EXISTS FOR AMENDING RULE 68.308(h)(2)(e) TO ACCOMMODATE USER NEEDS AND TECHNOLOGICAL REALITIES**

The comments demonstrate that broad base support exists among major carriers and equipment vendors to modify Rule 68.308(h)(2)(e) as proposed by Verilink. With the exception of IDCMA, the Commenters uniformly agreed that customer service problems arise from the carrier-customer joint engineering process and that end user selection of the wrong signal attenuation LBO option is a source of network harm that results in diminished transmission quality (*i.e.*, crosstalk).<sup>2/</sup> These Commenters also concurred with INC that the

---

<sup>2/</sup> See Comments of Larus Corporation at 1; Comments of PairGain Technologies, Inc. at 1; Comments of Ameritech at 2; Comments of NYNEX at 2; Comments of Bell Atlantic at 2.

"joint engineering" process -- that involves end user customers, carriers and sometimes manufacturers -- to determine the appropriate LBO setting is a source of confusion for end user customers. Moreover, this "joint engineering" process requires substantial expense and results in service delays, inefficiency and general customer dissatisfaction that may create an artificial disincentive to use DS1 service. All of the Commenters, except for IDCMA, agree with INC that end user customer confusion and dissatisfaction would be eliminated if LBO for the transmission path of a DS1 is provided as a component of regulated network interface connectors and that competition in the CPE market would not be adversely affected by such a change.<sup>3/</sup> Consistent with this view, Southwestern Bell Telephone Company argues that:

Verilink's proposal would allow Southwestern Bell and other carriers to more efficiently ensure that the signal received by the customer would have the best transmission quality, at no incremental cost to the customer and without any adverse impact on CPE competition;<sup>4/</sup>

and BellSouth Telecommunications, Inc. argues that:

Both the end user customer and the network provider would realize operational and maintenance efficiencies under the proposed rule change. Network provision of LBO would eliminate the need for joint engineering . . . Moreover, network provision of LBO would avoid the situation where an end user customer disrupts network services by inadvertently changing the LBO value to the incorrect setting during CPE replacement or maintenance activities.<sup>5/</sup>

---

<sup>3/</sup> See Comments of Larus Corporation at 1; Comments of PairGain Technologies, Inc. at 1; Comments of Ameritech at 2; Comments of NYNEX at 2; Comments of Bell Atlantic at 2.

<sup>4/</sup> Southwestern Bell Telephone Company at 1.

<sup>5/</sup> Comments of BellSouth Telecommunications, Inc. at 3.

Aside from eliminating customer inconvenience, expense and minimizing a source of potential network harm, modification of the Part 68 rules as proposed by Verilink will have the added benefit of encouraging the deployment of advanced digital transmission technologies and the modernization of the telecommunications infrastructure. INC concurs with numerous other Commenters that the proposed rule changes would be consistent with the ANSI DS1 interface standard because it would eliminate the requirement for LBO functionality in CPE.<sup>6/</sup>

## **II. IDCMA OFFERS NO COMPELLING ARGUMENTS TO SUPPORT ITS OPPOSITION TO VERILINK'S PETITION FOR RULEMAKING**

In contrast to the sound public policy reasons advanced by INC and other Commenters -- including carriers and vendors -- in support of Verilink's proposed rule modifications, IDCMA offers no rational arguments for maintaining the status quo. IDCMA's opposition to Verilink's proposal is evidently based on some general and unsubstantiated belief that the proposed modifications will adversely impact competition in the CPE industry. IDCMA's opposition is comprised of a series of conclusory statements that Verilink's arguments in favor of a rule change are unsubstantiated without any credible explanation of its conclusions.

Notably, in response to Verilink's central public policy rationale for proposing to modify Part 68 of the Commission's Rules -- customer confusion, expense and potential

---

<sup>6/</sup> The ANSI standard is designed to mitigate problems arising in the process of connecting CPE to DS1 service facilities by establishing a single pulse template and a uniform signal and from NCTE to the interface. See Comments of NYNEX Telephone Companies at 3; Comments of Larus Corporation at 2; Comments of Bell Atlantic at 2; Comments of Southwestern Bell Telephone Companies at 4. Comments of INC at 6.

network harm -- IDCMA simply states without much credible substantiation that the confusion and expense associated with LBO under the current rules [and attested to by several carriers and vendors] is a "gross overstatement".<sup>7/</sup> Aside from its summary statement that "its members have not experienced comparable problems with respect to the provision of NCTE or LBO setting,"<sup>8/</sup> IDCMA offers no evidence to support its conclusion that the confusion, expense and dissatisfaction associated with the joint engineering process is "grossly overstated". IDCMA further concludes that the "only joint activity necessary is for the carrier to tell the customer which of the three settings to be used."<sup>9/</sup> As detailed in Verilink's Petition and attested to by other Commenters, the "joint engineering" process is just not that simple. Contrary to IDCMA's suggestion, manufacturers routinely provide end user customers with instructions on selecting the appropriate LBO setting. Nevertheless, it is apparent from real world experience that end user customers are often not sufficiently knowledgeable about the operations of a DS1 transmission path to select the appropriate LBO setting.

Further, in its attempt to minimize the merit of Verilink's Petition, IDCMA simply ignores the impact of an incorrect LBO setting on the network. The fact is, one incorrect LBO setting may have repercussions for the network that require additional engineering of other users' systems beyond just "flipping" the LBO switch to the correct setting. In light of the numerous comments attesting to customer confusion, administrative expense, inefficiency and the real potential for network harm and the broad support for the rule change, INC

---

<sup>7/</sup> See Opposition of IDCMA at 7.

<sup>8/</sup> *Id.* at 8

<sup>9/</sup> *Id.*

strongly believes that the Commission must be provided with specific compelling public policy reasons, rather than unsubstantiated conclusory statements of disagreement, to justify denial of Verilink's Petition. INC submits that IDCMA's failure to provide substantive public policy reasons for maintaining the status quo underscores the lack of merit in its opposition. Accordingly, INC urges the Commission to grant Verilink's Petition and initiate a rulemaking proceeding.

Further, in its search for credible arguments in opposition to the proposed rule change, IDCMA misconstrues Verilink's proposal as it relates to the voluntary industry consensus embodied in ANSI standard T1.403.<sup>10/</sup> Contrary to IDCMA's suggestion that adoption of Verilink's proposal would be tantamount to allowing ANSI standards to define Commission policy, INC submits that Verilink's proposal appropriately suggests to the Commission that the proposed rule change would harmonize the Commission's rules with industry-developed standards and advance its policy goal of encouraging the deployment of advanced technologies without adversely affecting competition in the CPE industry. INC concurs with Verilink that where the Commission's public interest policies are served, the Commission should attempt to harmonize its rules with accepted industry-accepted standards.

---


<sup>10/</sup> ANSI T1.403 refers to the American National Standards Institute, Standard for Telecommunications -- Carrier to Customer Installation -- DS1 Metallic Interface.

### **III. CONCLUSION**

For the reasons discussed herein, INC fervently believes that Verilink's Petition makes a compelling case for amending of Part 68 rules to permit carrier provision of LBO functionality in the DS1 transmission path as a part of regulated network equipment located on customer premises. Accordingly, Verilink urges the Commission to grant Verilink's Petition for Rulemaking and expeditiously issue a notice of proposed rulemaking.

Respectfully submitted,

**INTEGRATED NETWORK CORPORATION**

By:   
Andrew D. Lipman  
Margaret M. Charles

Swidler & Berlin  
3000 K Street N.W.  
Suite 300  
Washington, D.C. 20007

Its Attorneys

Date: February 23, 1993

**CERTIFICATE OF SERVICE**

I hereby certify that on February 23, 1993, copies of the foregoing document have been sent by first-class, postage-prepaid mail to the following:

William J. Buckley  
Verilink Corporation  
145 Baytech Drive  
San Jose, CA 95134

Austin Lesea  
Larus Corporation  
2160 Del Franco Street  
San Jose, CA 95131

Mike Lefkowitz  
PairGain Technologies, Inc.  
12921 E. 166th Street  
Cerritos, CA 90701-2104

Floyd S. Keene  
Michael S. Pabian  
Ameritech Operating Companies  
Room 4H76  
2000 West Ameritech Center Dr.  
Hoffman Estates, IL 60196

Michael D. Lowe  
Lawrence W. Katz  
The Bell Atlantic Telephone  
Companies  
1710 H Street, N.W.  
Washington, D.C. 20006


William B. Barfield  
Thompson T. Rawls II  
BellSouth Telecommunications,  
Inc.  
1155 Peachtree Street, N.E.  
Suite 1800  
Atlanta, GA 30367

Daniel L. Bart  
GTE Service Corporation  
1850 M Street, N.W.  
Suite 1200  
Washington, D.C. 20036

Patrick A. Lee  
Deborah Haraldson  
New England Telephone and  
Telegraph Company and  
New York Telephone Company  
120 Bloomingdale Road  
White Plains, NY 10605

James E. Taylor  
Richard C. Hartgrove  
Robert J. Gryzmala  
Southwestern Bell Telephone  
Company  
1010 Pine Street, Room 2114  
St. Louis, MO 63101

Herbert E. Marks  
James L. Casserly  
Kerry E. Murray  
Squire, Sanders & Dempsey  
Attorneys for IDCMA  
1201 Pennsylvania Avenue, N.W.  
P.O. Box 407  
Washington, D.C. 20044

  
Letha R. Martin